~~Claims~~

WHAT IS CLAIMED IS:

1. - 15. (canceled)

16. (new) A biocompatible scaffold for tissue culture and cell culture and for producing implants or implant materials, the scaffold comprised of at least one base material and fibers that are electrostatically flocked onto at least one side of the at least one base material.

17. (new) The scaffold according to claim 16, wherein at least one of the at least one base material and the fibers are comprised of a resorbable material.

18. (new) The scaffold according to claim 17, wherein the resorbable material of the fibers is a resorbable polymer and wherein the resorbable material of the at least one base material is selected from the group consisting of collagen, collagen derivatives, hyaluronic acid, chitosan, gelatine, and composites of collagen, collagen derivatives, hyaluronic acid, chitosan and gelatine.

19. (new) The scaffold according to claim 18, wherein the resorbable material of the fibers is selected from the group consisting of polyactide; polycaproplactone; polyhydroxybutyate; polyglycolide; derivatives of polyactide, polycaproplactone, polyhydroxybutyate, or polyglycolide; and copolymers of polyactide, polycaproplactone, polyhydroxybutyate, or polyglycolide.

20. (new) The scaffold according to claim 16, further comprising an adhesive coated onto the at least one side of the at least base material.

21. (new) The scaffold according to claim 17, wherein at least one of the at least one base material, the adhesive, and the fibers are comprised of a resorbable material.

22. (new) The scaffold according to claim 21, wherein the resorbable material of the fibers is a resorbable polymer; wherein the resorbable material of the base material is selected from the group consisting of collagen; collagen derivatives; hyaluronic acid; chitosan; gelatine; and composites of collagen, collagen derivatives, hyaluronic acid, chitosan or gelatine.

23. (new) The scaffold according to claim 22, wherein the resorbable material of the adhesive is selected from the group consisting of collagen; collagen derivatives;

hyaluronic acid; chitosan; gelatine; and composites of collagen, collagen derivatives, hyaluronic acid, chitosan or gelatine.

24. (new) The scaffold according to claim 22, wherein the resorbable material of the fibers is selected from the group consisting of polyactide; polycaproplactone; polyhydroxybutyate; polyglycolide; derivatives of polyactide, polycaproplactone, polyhydroxybutyate, or polyglycolide; and copolymers of polyactide, polycaproplactone, polyhydroxybutyate, or polyglycolide.

25. (new) The scaffold according to claim 16, wherein the fibers have a length between 0.3 mm and 3 mm.

26. (new) The scaffold according to claim 25, wherein the fibers have a diameter of between 10 µm and 200 µm.

27. (new) The scaffold according to claim 16, wherein the fibers have a diameter of between 10 µm and 200 µm.

28. (new) The scaffold according to claim 16, wherein the fibers are arranged on the base material so as to have a mean distance from 40 µm to 250 µm.

29. (new) The scaffold according to claim 16, wherein at least some of the fibers are hollow fibers.

30. (new) The scaffold according to claim 16, further comprising cells colonized on the scaffold.

31. (new) A multi-layered scaffold structure comprising at least two biocompatible scaffolds according to claim 16 that are connected to one another.

32. (new) The multi-layered scaffold structure according to claim 31, wherein the at least two biocompatible scaffolds are stacked on top of one another.

33. (new) The multi-layered scaffold structure according to claim 32, wherein the at least two biocompatible scaffolds are inserted into one another with the at least one side flocked with the fibers.

34. (new) The multi-layered scaffold structure according claim 31, comprising cavities or a system of cavities.

35. (new) An implant material comprising a biocompatible scaffold according to claim 16 or a multi-layered scaffold structure according to claim 31.

36. (new) The implant material according to claim 35, further comprising an envelope surrounding the biocompatible scaffold or the multi-layered scaffold structure.

37. (new) The implant material according to claim 36, wherein the envelope is a textile fabric, a film, or a tape.

38. (new) An implant comprising a biocompatible scaffold according to claim 16 or a multi-layered scaffold structure according to claim 31.

39. (new) The implant according to claim 38, further comprising an envelope surrounding the biocompatible scaffold or the multi-layered scaffold structure.

40. (new) The implant according to claim 39, wherein the envelope is a textile fabric, a film, or a tape.

41. (new) A process for producing a tissue culture or a cell culture or an implant material, comprising the steps of:

a) preparing a scaffold by electrostatically flocking fibers onto at least one side of a base material;

b) introducing cells into the scaffold;

c) incubating the cells in the scaffold for colonizing the scaffold with cells and forming an extra-cellular matrix.

42. (new) The process according to claim 41, further comprising the step of removing the base material after the extra-cellular matrix has been formed.

43. (new) An implant material containing cells and an extra-cellular matrix, produced by the steps of:

a) preparing a scaffold by electrostatically flocking fibers onto at least one side of a base material;

b) introducing cells into the scaffold;

c) incubating the cells in the scaffold for colonizing the scaffold with cells and forming an extra-cellular matrix;

d) removing the base material after the extra-cellular matrix has been formed.